

FILE 'HOME' ENTERED AT 08:20:20 ON 12 MAY 2005

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS SINCE FILE TOTAL
SESSION
FULL ESTIMATED COST ENTRY 0.21 0.21

FILE 'BIOSIS' ENTERED AT 08:20:37 ON 12 MAY 2005
Copyright (c) 2005 The Thomson Corporation

FILE 'MEDLINE' ENTERED AT 08:20:37 ON 12 MAY 2005

FILE 'CAPLUS' ENTERED AT 08:20:37 ON 12 MAY 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 08:20:37 ON 12 MAY 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 08:20:37 ON 12 MAY 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s synthe? (4a) array? (6a) chemical
L1 273 SYNTHE? (4A) ARRAY? (6A) CHEMICAL

L2 139 L1 AND CHAMBER?

=> s 12 and another (3a) chamber?
1.3 10 1.2 AND ANOTHER (3A) CHAMBER?

=> s 13 and inlet

```
=> dup rem l4  
PROCESSING COMPLETED FOR L4  
L5          8 DUP REM L4 (0 DUPLICATES REMOVED)
```

=> s 15 and outlet
I-6 8 15 AND OUTLET

⇒ d 16 bib abs 1-8

L6 ANSWER 1 OF 8 USPATFULL on STN
AN 2004:233379 USPATFULL
TI Flow cell for chemical reactions
IN Bass, Jay K., Mountain View, CA, UNITED STATES
McEntee, John F., Boulder Creek, CA, UNITED STATES
Lazaruk, Tim J., Redwood City, CA, UNITED STATES
Mobed-Miremadi, Maryam, Sunnyvale, CA, UNITED STATES
PI US 2004180450 A1 20040916
AI US 2004-810074 A1 20040326 (10)
RLI Division of Ser. No. US 2001-896596, filed on 29 Jun 2001, GRANTED, Pat.
No. US 6713023
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual
Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1290
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Devices and methods are disclosed for synthesizing compounds on the

surface of supports. The devices are flow devices, which include a housing comprising a housing **chamber**. The housing has an opening adapted for insertion of a support into the housing **chamber**. A sealing member is movably mounted in the housing **chamber** and adapted to engage the support to form a reagent **chamber** between a surface of the support and a surface of the sealing member. A mechanism is included for moving the sealing member within the housing **chamber**. The device has both an **inlet** and an **outlet**, which are both in fluid communication with the reagent **chamber**. In the methods of the invention a support is placed into a **chamber** of a device such as described above. The mechanism adapted to engage the support on a surface opposite the surface engaged by the sealing member is activated to urge the support toward the sealing member. The pressure-activated mechanism is activated to urge the support against the aforesaid mechanism and against an interior wall of the housing **chamber** to form the reagent **chamber**. A fluid reagent for conducting the reaction step is introduced into the reagent **chamber** by means of the **inlet**. Thereafter, the fluid reagent is removed from the reagent **chamber**. The pressure-activated mechanism is deactivated and the support is removed from the housing **chamber**. In this way the reagent **chamber** is formed and un-formed in situ.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 8 USPATFULL on STN
AN 2004:101144 USPATFULL
TI Methods for manufacturing arrays
IN Bass, Jay K., Mountain View, CA, UNITED STATES
McEntee, John F., Boulder Creek, CA, UNITED STATES
Lazaruk, Tim J., Redwood City, CA, UNITED STATES
Miremadi, Maryam Mobed-, Sunnyvale, CA, UNITED STATES
PI US 2004077006 A1 20040422
AI US 2003-652114 A1 20030829 (10)
RLI Division of Ser. No. US 2001-896572, filed on 29 Jun 2001, GRANTED, Pat.
No. US 6649348
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Intellectual Property Administration, Legal Department, DL429, P. O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 49
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1232

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Apparatus and methods are disclosed for synthesizing a plurality of compounds on the surface of supports. Biopolymer features are attached to the surfaces of the supports. The synthesis generally comprises a plurality of steps. In the present invention at least two of the steps are performed by placing a support having a functionalized surface into a **chamber** of a flow cell and subjecting the surface to a step of the synthesis and placing the support into a **chamber** of another flow cell and subjecting the surface to another step of the synthesis. An apparatus generally comprises a plurality of flow cells and one or more fluid dispensing stations are mounted on the platform and are in fluid communication with one or more of the plurality of flow cells. A station for monomer addition to the surface of the support is mounted on the platform. The apparatus further comprises a mechanism for moving a support to and from the station for monomer addition and a flow cell and from one flow cell to another flow cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 8 USPATFULL on STN
AN 2003:330132 USPATFULL
TI Methods for testing reagent distribution in reaction **chambers**

IN Leproust, Eric M., Campbell, CA, UNITED STATES
Amorese, Douglas A., Los Altos, CA, UNITED STATES
Peck, Bill J., Mountain View, CA, UNITED STATES
PI US 2003232343 A1 20031218
AI US 2002-172675 A1 20020614 (10)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual
Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1878

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Apparatus and methods are disclosed for determining a functional
property of a fluid in a **chamber**. A support to which is bound
a plurality of test elements is introduced into the **chamber**.
Each of the test elements comprises a reaction domain and a detection
domain. A fluid that is interactive with the reaction domains is
introduced into the **chamber**. Fluid is removed from the
chamber. The locations at which the fluid has not interacted
with the reaction domains is determined by means of the detection
domains. The locations are then related to the functional property of
the fluid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT..

L6 ANSWER 4 OF 8 USPATFULL on STN
AN 2003:329929 USPATFULL
TI Methods for reagent removal in flow **chambers**
IN Remick, Joseph, Milpitas, CA, UNITED STATES
Feurtado, Anthony J.D., San Jose, CA, UNITED STATES
Mobed-Miremadi, Maryam, Sunnyvale, CA, UNITED STATES
Lazaruk, Tim J., Redwood City, CA, UNITED STATES
Bass, Jay K., Mountain View, CA, UNITED STATES
PI US 2003232140 A1 20031218
AI US 2002-172470 A1 20020614 (10)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual
Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1234

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and apparatus are disclosed for synthesizing a plurality of
compounds on the surface of supports. Biopolymer features are attached
to the surfaces of the supports. The synthesis generally comprises a
plurality of steps. The support is placed into a flow **chamber**,
and a reagent is introduced into the flow **chamber**. The reagent
is reactive with features on the surface of the support. During removal
of the reagent from the flow **chamber**, the pressure in the
chamber is maintained substantially atmospheric. In another
embodiment the reagent is removed from the flow **chamber** under
vacuum. In another embodiment the reagent is removed from the
flow **chamber** by simultaneously venting and applying a vacuum
to the flow **chamber**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 8 USPATFULL on STN
AN 2003:172873 USPATFULL
TI Fluid exit in reaction **chambers**
IN Peck, Bill J., Mountain View, CA, UNITED STATES
PI US 2003118717 A1 20030626
US 6846454 B2 20050125
AI US 2001-35789 A1 20011224 (10)

DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599

CLMN Number of Claims: 46
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)

LN.CNT 1912

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Apparatus and methods are disclosed for controlling flow of fluid inside a **chamber**. A device comprises a **chamber** comprising at least one wall, a first opening for introducing a fluid into the interior of the **chamber**, and a second opening opposite the first opening. The at least one wall of the **chamber** is designed to provide a contracting section, a section having substantially constant cross-sectional area and a diffusing section through the **chamber** from the first opening to the second opening. The device may be employed as a gas **outlet** in a reaction **chamber** for conducting reactions where it is desired to control the internal atmosphere of the reaction **chamber**. The apparatus may be employed in the manufacture of biopolymers on the surface of a support such as an array of biopolymer features on the support. Also disclosed is a holding element for a support wherein the holding element is a low drag body.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 8 USPATFULL on STN
AN 2003:172638 USPATFULL
TI Atmospheric control in reaction **chambers**
IN Peck, Bill J., Mountain View, CA, UNITED STATES
PI US 2003118482 A1 20030626
AI US 2001-35788 A1 20011224 (10)
DT Utility
FS APPLICATION
LREP AFILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)

LN.CNT 1577

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Apparatus and methods are disclosed for controlling atmospheric characteristics inside a **chamber**. An apparatus comprises a mechanism for diffusively introducing pressurized gas into the apparatus, an **outlet** element in fluid communication with the mechanism, and a **chamber** in fluid communication with the **outlet** element. The **outlet** element and the **chamber** are disposed such that gas flow therethrough is substantially uniform. The **chamber** comprises a gas **outlet** and the **outlet** element comprises a plurality of openings. The apparatus may be employed in the manufacture of biopolymers on the surface of a support such as an array of biopolymer features on the support.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 7 OF 8 USPATFULL on STN
AN 2003:3469 USPATFULL
TI Flow cell for chemical reactions
IN Bass, Jay K., Mountain View, CA, UNITED STATES
McEntee, John F., Boulder Creek, CA, UNITED STATES
Lazaruk, Tim J., Redwood City, CA, UNITED STATES
Mobed-Miremadi, Maryam, Sunnyvale, CA, UNITED STATES
PI US 2003003504 A1 20030102
US 6713023 B2 20040330
AI US 2001-896596 A1 20010629 (9)
DT Utility

FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual
Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 1290

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Devices and methods are disclosed for synthesizing compounds on the surface of supports. The devices are flow devices, which include a housing comprising a housing **chamber**. The housing has an opening adapted for insertion of a support into the housing **chamber**. A sealing member is movably mounted in the housing **chamber** and adapted to engage the support to form a reagent **chamber** between a surface of the support and a surface of the sealing member. A mechanism is included for moving the sealing member within the housing **chamber**. The device has both an **inlet** and an **outlet**, which are both in fluid communication with the reagent **chamber**. In the methods of the invention a support is placed into a **chamber** of a device such as described above. The mechanism adapted to engage the support on a surface opposite the surface engaged by the sealing member is activated to urge the support toward the sealing member. The pressure-activated mechanism is activated to urge the support against the aforesaid mechanism and against an interior wall of the housing **chamber** to form the reagent **chamber**. A fluid reagent for conducting the reaction step is introduced into the reagent **chamber** by means of the **inlet**. Thereafter, the fluid reagent is removed from the reagent **chamber**. The pressure-activated mechanism is deactivated and the support is removed from the housing **chamber**. In this way the reagent **chamber** is formed and un-formed in situ.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 8 USPATFULL on STN
AN 2003:3188 USPATFULL
TI Methods for manufacturing arrays
IN Bass, Jay K., Mountain View, CA, UNITED STATES
McEntee, John F., Boulder Creek, CA, UNITED STATES
Lazaruk, Tim J., Redwood City, CA, UNITED STATES
Mobed-Miremadi, Maryam, Sunnyvale, CA, UNITED STATES
PI US 2003003222 A1 20030102
US 6649348 B2 20031118
AI US 2001-896572 A1 20010629 (9)
DT Utility
FS APPLICATION
LREP AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual
Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN Number of Claims: 49
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1231

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Apparatus and methods are disclosed for synthesizing a plurality of compounds on the surface of supports. Biopolymer features are attached to the surfaces of the supports. The synthesis generally comprises a plurality of steps. In the present invention at least two of the steps are performed by placing a support having a functionalized surface into a **chamber** of a flow cell and subjecting the surface to a step of the synthesis and placing the support into a **chamber** of another flow cell and subjecting the surface to another step of the synthesis. An apparatus generally comprises a plurality of flow cells and one or more fluid dispensing stations are mounted on the platform and are in fluid communication with one or more of the plurality of flow cells. A station for monomer addition to the surface of the support is mounted on the platform. The apparatus further comprises a mechanism for moving a support to and from the station for

monomer addition and a flow cell and from one flow cell to another flow cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>